

Applicants: Ron. S. Israeli et al.
U.S. Serial No.: 09/724,026
Filed: November 28, 2000

Pending Claims 90-107

90. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and comprising within its structure consecutive amino acids having the sequence Asp-Glu-Leu-Lys-Ala-Glu (SEQ ID NO:35), provided that the polypeptide comprises more amino acids than those present in SEQ ID NO:35 and the sequence of the polypeptide is included within SEQ ID NO:2
91. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and comprising within its structure consecutive amino acids having the sequence Asn-Glu-Asp-Gly-Asn-Glu (SEQ ID NO:36).
92. The isolated nucleic acid of claim 91 wherein the polypeptide comprises more amino acids than those present in SEQ ID NO:36 and the sequence of the polypeptide is included within SEQ ID NO:2.
93. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and comprising within its structure consecutive amino acids having the sequence Lys-Ser-Pro-Asp-Glu-Gly (SEQ ID NO:37).

Applicants: Ron. S. Israeli et al.
U.S. Serial No.: 09/724,026
Filed: November 28, 2000

94. The isolated nucleic acid of claim 93 wherein the polypeptide comprises more amino acids than those present in SEQ ID NO:37 and the sequence of the polypeptide is included within SEQ ID NO:2.

95. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and comprising within its structure consecutive amino acids having the sequence Ala-Gly-Ala-Leu-Val-Leu-Ala-Gly-Gly-Phe-Phe-Leu-Leu-Gly-Phe Leu-Phe (SEQ ID NO:38).

96. The isolated nucleic acid of claim 95 wherein the polypeptide comprises more amino acids than those present in SEQ ID NO:38 and the sequence of the polypeptide is included within SEQ ID NO:2.

97. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and having within its structure each of the following consecutive amino acid sequences:

- (a) Asp-Glu-Leu-Lys-Ala-Glu (SEQ ID NO:35);
- (b) Asn-Glu-Asp-Gly-Asn-Glu (SEQ ID NO:36); and
- (c) Lys-Ser-Pro-Asp-Glu-Gly (SEQ ID NO:37).

98. The isolated nucleic acid of claim 97 wherein the polypeptide comprises more amino acids than those present

Applicants: Ron. S. Israeli et al.
U.S. Serial No.: 09/724,026
Filed: November 28, 2000

in SEQ ID NO:35, SEQ ID NO:36 and SEQ ID NO:37 and the sequence of the polypeptide is included within SEQ ID NO:2.

99. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, and having within its structure each of the following consecutive amino acid sequences:

- (a) Asp-Glu-Leu-Lys-Ala-Glu (SEQ ID NO:35);
- (b) Asn-Glu-Asp-Gly-Asn-Glu (SEQ ID NO:36);
- (c) Lys-Ser-Pro-Asp-Glu-Gly (SEQ ID NO:37); and
- (d) Ala-Gly-Ala-Leu-Val-Leu-Ala-Gly-Gly-Phe-Phe-Leu-Leu-Gly-Phe-Leu-Phe (SEQ ID NO:38).

100. The isolated nucleic acid of claim 99 wherein the polypeptide comprises more amino acids than those present in SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37 and SEQ ID NO:38 and the sequence of the polypeptide is included within SEQ ID NO:2.

101. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide, wherein the polypeptide is capable of generating antibodies specific to prostate specific membrane antigen, and having within its structure consecutive amino acids having a sequence which is present in SEQ ID NO:2.

102. An isolated nucleic acid which encodes an antigenic

Applicants: Ron. S. Israeli et al.
U.S. Serial No.: 09/724,026
Filed: November 28, 2000

prostate specific membrane antigen polypeptide characterized by antigenicity, which nucleic acid has within its structure at least 15 consecutive nucleotides, the sequence of which is present in SEQ ID NO:1.

103. An isolated nucleic acid which encodes an antigenic prostate specific membrane antigen polypeptide characterized by antigenicity, which nucleic acid has within its structure consecutive nucleotides, the sequence of which is in SEQ ID NO:1 and encodes at least six consecutive amino acids shown in SEQ ID NO:2.

104. The isolated nucleic acid of claim 103 wherein the consecutive nucleotides are in SEQ ID NO:1 and the antigenic prostate specific membrane antigen has a sequence within SEQ ID NO:35.

105. The isolated nucleic acid of claim 103 wherein the consecutive nucleotides are in SEQ ID NO:1 and the antigenic prostate specific membrane antigen has a sequence within SEQ ID NO:36.

106. The isolated nucleic acid of claim 103 wherein the consecutive nucleotides are in SEQ ID NO:1 and the antigenic prostate specific membrane antigen has a sequence within SEQ ID NO:37.

107. The isolated nucleic acid of claim 103 wherein the

Applicants: Ron. S. Israeli et al.
U.S. Serial No.: 09/724,026
Filed: November 28, 2000

consecutive nucleotides are in SEQ ID NO:1 and the antigenic prostate specific membrane antigen has a sequence within SEQ ID NO:38.